



Scadoxus

a bright display

The attractive scarlet fruit of *Scadoxus membranaceus*.

SCADOXUS ARE ATTRACTIVE, FAIRLY large deciduous bulbous plants, widely distributed in a variety of habitats, primarily in the summer rainfall region of South Africa. They are characterised by large heads of bright orange to reddish compound flowers that emerge mostly at the beginning of the growing season before the leaves appear.

Scadoxus are known by a variety of common names such as blood lily, referring to the colour of the flowers and bracts, paintbrush, *skeerkwas* (Afrikaans for a shaving brush) and katherine wheel, referring to the shape of the flower heads in the various species. A group of

'There are only three species in South Africa.'

these magnificent plants in flower is an impressive sight. Some of the species are surprisingly common and widespread and well worth looking out for.

Identity and distribution

Scadoxus is a small genus within the family Amaryllidaceae and consists of only nine species occurring throughout Africa. The seemingly meaningless name *Scadoxus* was coined by the botanist Constantine Samuel Rafinesque in 1838, but in naming it he added the comment *umb glor* (glorious umbel) which is indeed descriptive of the species when they flower.

Scadoxus multiflorus subspecies *katharinae*, a robust plant up to 1,2m tall that occurs in shady spots in coastal forest along the KwaZulu-Natal coast.

Previously included in *Haemanthus*, they were separated on the basis of various morphological characteristics such as leaf shape and rootstock as well as DNA analysis. The rootstock is predominantly an elongated rhizome, with a bulbous part above. The leaves are borne on stalks which sometimes sheath the stem, and soft-textured with a prominent midrib.

The flowers are pollinated by sunbirds, butterflies and other insects and the fleshy seeds develop in pulpy berries which become bright red when ripe, drop off the plant and germinate spontaneously where they fall or are scattered by birds and monkeys. In two of the South African

species the flowers and berries are enclosed in a cup of contrasting bracts which vary in colour from bright green to deep purple.

There are only three species in South Africa, which are readily distinguishable. *Scadoxus membranaceus* is the one least often seen in the wild. It's a shade-loving plant confined to fairly dense coastal bush and dune forest from Port Elizabeth northwards up the east coast, where it's often found growing on rock ledges.

It's the smallest of the three species and doesn't reach a height of more than about 30cm. It multiplies by means of offsets and the older plants eventually develop into large clumps, giving massed displays of blooms when they flower in mid-summer.

Scadoxus multiflorus is a robust, large and showy shade-loving plant up to 1,2m tall that flowers in mid-summer. It's been separated into two subspecies in Southern Africa. The subspecies *katharinae* is named after Katharine Saunders (1824-1901) a plant collector and botanical artist. Commonly known as the katherine wheel it's the larger of the two subspecies with longer, broader leaves and a more open flower head. It's found in forest and bush along the KZN coast. The subspecies *multiflorus*, commonly known as the fire-ball lily, has shorter, smaller leaves and a more compact flower head. It's found in bushveld and forest from northern KZN through the Lowveld and up into central Africa, and flowers a little earlier than subspecies *katharinae*. A

- The genus consists of only nine species, occurring throughout Africa.

- Although used in traditional medicine too much can be fatal.

- Their adaptability should not be underestimated.





ABOVE: A magnificent group of *Scadoxus puniceus* at Kei Mouth.

ABOVE RIGHT: A group of *Scadoxus puniceus* on a *krantz* on the farm Middledrift in the Cathcart district.

RIGHT: *Scadoxus membranaceus* occurs in deep shade in coastal forest and dune thicket along the eastern coastal belt.



similar species with larger individual flowers making up the umbel, *Scadoxus pole-evansii*, occurs just outside our border in Zimbabwe.

Scadoxus puniceus is the most common and widespread of the three South African species, occurring throughout the northern provinces, KZN, the Eastern Cape and as far westward as De Hoop Nature reserve in the Western Cape. While generally preferring shaded and sheltered habitats, this plant has surprisingly adapted to many less hospitable environments.

It occurs in the understory of Afromontane forest, particularly in rocky outcrops with dappled shade where large populations can sometimes be found, with massed displays of blooms in spring. Isolated populations at higher altitudes in grassland invariably occur on south-facing ridges and *krantzes* protected to some extent from the sun. I've come across them

'The berries are eaten by birds, mice and monkeys.'

at altitudes close to 2 000m at the summit of Gaika's Kop near Hogsback for instance, and also in the foothills of the Winterberg in the Eastern Cape, proving they are hardy and frost tolerant. This is a far cry from the lowland forest in Limpopo where I've also observed them. I've even found them under thorn trees in dry thicket vegetation in the

Kei River valley. At their western extremity in the De Hoop Nature Reserve there are populations under sparse bush cover on the southern slopes of old fossil dunes.

The Western populations generally flower much later in the summer, well after Christmas, an adaptation that ensures seed drop and germination just before the onset of winter rain.

Use and appreciation

The bulbs of *Scadoxus*, in common with most Amaryllidaceae, are poisonous, although the vegetative parts are browsed by herbivores and the berries are eaten by birds, mice and monkeys – but the seeds are often discarded.

Decoctions from the bulbs of *Scadoxus puniceus* are used in traditional medicine to treat coughs, intestinal problems and as emetics. The leaves are used as an antiseptic on sores and ulcers. However, according to the book *Medicinal Plants of Southern Africa* by Van Wyk, Van Oudtshoorn and Gericke,

the plants have limited medicinal value and their indiscriminate use can be lethal.

But it's as garden plants that *Scadoxus* really come into their own. They're excellent subjects for shaded and semi-shaded areas, are easy to grow and develop rapidly into large, magnificent plants that flower regularly and profusely. The scarlet berries of the ripening fruit are as attractive as the flowers. *Scadoxus* can make spectacular pot plants, are easily grown from seed and are available at wildflower nurseries.

Landowners with suitable habitats should be on the lookout for *Scadoxus* – particularly *Scadoxus puniceus* in the Eastern and southern Cape. It could be found in suitable spots on many properties.

If populations are found that are infested with alien invader plants or are threatened for other reasons, the cleaning and careful management of the area where they grow will be worth the effort.

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